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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, JIMMY T

ART UNIT PAPER NUMBER

3725

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/834,946

Applicant(s)

HIROSE ET AL.

Examiner

Jimmy T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/30/03 & 1/26/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 26, 2004 has been entered.

Drawings

The proposed drawings filed on April 30, 2003 has been acknowledged and approved. The proposed drawings overcome the drawing objections noted in the last Office action.

Specification

The amendment filed April 30, 2003 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Regarding claim 1, lines 1 -2 and claim 5, lines 3-4, the original specification does not provide any support for "a set of calender rollers comprising at least three rolling rollers and one feed roller". The specification does not disclose that any of the rollers 1-4 are the feed roller. If the Applicant refers to a roller (22) as the feed roller, this roller (22) is not part of the set of the calender rollers. Furthermore, the specification does not disclose that any of the rollers in figure 1 and 2 is a "feed roller".

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Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1 and 5, see similar discussion in the objection to the specification above regarding the new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, line 5, it is unclear whether "a pair of nip rollers" are the same rollers as the rolling rollers as claimed in line 1. If they are the same rollers, it is suggested that the claim should clearly define the relationship between these rollers; for example: "said at least

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three rolling rollers includes a pair of nip rollers, said nip portion is formed between said pair of nip rollers, said pair of nip rollers including a holding roller for ...”.

Regarding claim 1, line 6, it is unclear whether “a center roller” as claimed is the same roller as the “holding roller” as claimed in line 5. The specification discloses that the holding roller is the center roller (page 9, line 21). If they are the same roller, it is suggested that the limitation “a center roller” be changed to --- said holding roller ---. Additionally, there is no antecedent basis for “said nip portion of a center roll” in the claim.

Regarding claim 5, line 4, it is unclear whether “a pair of nip rollers” are the same rollers as the rolling rollers as claimed in line 3. If they are the same rollers, it is suggested that the claim should clearly defines the relationship between these rollers; for example: “said at least three rolling rollers includes a pair of nip rollers, said nip portion is formed between said pair of nip rollers, said pair of nip rollers including a holding roller for ...”.

Regarding claim 5, line 5, it is unclear whether “a center roller” as claimed is the same roller as the “holding roller” as claimed in line 4. The specification discloses that the holding roller is the center roller (page 9, line 21). If they are the same roller, it is suggested that the limitation “a center roller” be changed to --- said holding roller ---. Additionally, there is no antecedent basis for “said nip portion of a center roll” in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 7, and 9-10, as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by British Celanese Limited (hereinafter "BCL") (GB 456, 377).

Regarding claims 1 and 5, BCL disclose an apparatus and a method for producing a laminated sheet comprising a set of calender rollers having at least three rollers (15, 16, and 19), the at least three rollers including a pair of nip rollers (16, 19) forming a nip portion (at element (33) in fig. 1), the pair of nip rollers including a holding roller (16) for holding a rolled plastic material sheet (17) and behind the nip portion of the holding roller, a release member (21) is arranged in proximity the holding roller, and a roller (fig. 1 and page 2, lines 111-113) is arranged at a position lower than the position of the nip portion. Note that BCL discloses in figure 1 that the laminated sheet is being pulled downward and rolled into a collecting roll (page 2, line 113); and thus, BCL inherently discloses a roller arranged at a position lower than the position of the nip portion.

BCL discloses the steps of rolling a plastic material (12) into the plastic material sheet (17); laminating the plastic material sheet onto a base material sheet (18) at the nip portion, the resulting laminated sheet is coated with the plastic material and is being pressed being the heat rollers (16, 19); therefore, the resulting laminated sheet inherently held on the holding roller to the position of the releasing member. BCL further discloses the step of releasing a layer of the

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plastic material sheet (by the releasing member) from the holding roller by curling it toward the direction of the collecting roller.

Regarding claims 3 and 7, the releasing member is a doctor knife (page 2, lines 74-75).

Regarding claims 9-10, the plastic material is a pressure sensitive adhesive, which is a rubber based pressure sensitive adhesive (page 2, lines 1-53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over BCL in view of Borgstrom (USPN 6,325,878). BCL discloses the release member. BCL does not disclose the release member is heated. However, Borgstrom teaches a release member (15) that is heated to a temperature at 50 degree or more (see column 9, lines 40-48) to release a gluing material off an applicator roller (11). Therefore, it would have been obvious to one having ordinary skill in the art the time the invention was made to provide BCL's releasing member with a heating element, as taught by Borgstrom, in order to improve the releasing of the material off the holding roller.

Claims 4, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over BCL in view of Gerhardt (USPN 5,601,868).

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Regarding claims 4 and 8, BCL discloses the doctor knife. BCL does not disclose the doctor knife is vibrated. However, Gerhardt, in a relate laminating art, teaches an oscillating doctor knife (1) that is vibrated by a pressure controlled actuator (14) to remove any deposit off a roller (2) (column 2, line 40 – column 3, line 35). Therefore, it would have been obvious to one having ordinary skilled in the art the time the invention was made to provide BCL's doctor knife with a vibrating device, as taught by Gerhardt, in order to eliminate streak-causing deposits between the doctor knife and the sheet (column 1, lines 44-47).

Regarding claim 12, BCL, as modified by Gerhardt, discloses the vibrating is carried out using an air cylinder (col. 2, lines 53-54).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over BCL and Borgstrom, in further view of Nordstrom et al. (hereinafter "Nordstrom") (US 2,375,812). BCL as modified by Borgstrom, discloses the heated release member. BCL does not disclose the specific heating device for heating the releasing member is a band heater. However, the patent to Nordstrom teaches a release member (22) is being heated with a band heater (46-49) in order to maintain the release member at a desirable elevated temperature (page 2, right column, lines 1-5). Therefore, it would have been obvious to one having ordinary skilled in the art the time the invention was made to provide BCL with the type of heating element such as a band heater, as taught by Nordstrom, in order to maintain the release member at a desirable elevated temperature.

Response to Arguments

Applicant's arguments filed April 30, 2003 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T. Nguyen whose telephone number is (571) 272-4520. The examiner can normally be reached on Mon-Thur 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272- 4419. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTNguyen
August 4, 2005


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